



## Peculiarities of Clinic and Diagnostics of Phlegmon of the Oral Floor

1. K.E. Shomurodov

2. R.H. Nabiyeu

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Tashkent State Dental Institute

**Abstract:** The problem of surgical infections is extremely topical in the practice of maxillofacial surgery. The frequent development of abscesses and phlegmon in the maxillofacial region and in the neck is caused by the high prevalence of chronic focal odontogenic and tonsillogenic infections as well as infectious-inflammatory skin lesions of the maxillofacial region and oral mucosa.

**Key words:** maxillofacial region, inflammatory diseases, phlegmon

### INTRODUCTION

Inflammatory diseases of the maxilla are a large group of diseases of infectious and inflammatory nature affecting the jaw bones, adjoining soft tissues and fatty spaces, and regional lymph nodes, caused by diseases of the tooth or tissues immediately adjacent to it. The gates of infection in this case are either defects of the hard tissues of the tooth or the epithelial cover of the gum. The source of the development of purulent-inflammatory processes of the peripharyngeal space can be inflammatory processes of the palatine tonsils, as well as traumatic injuries of the pharynx (tonsillo-genous causes). As a non-odontogenic source of development of purulent-inflammatory processes of the maxillary space can be traumatic damages of skin and mucosa of the maxillary space, inflammatory diseases of salivary glands, infectious lesions of subcutaneous tissue (furunculus, carbuncle, suppurated atheroma), inflammation of medial and lateral cysts of the neck. Phlegmon of the maxillofacial area usually proceeds violently and in the shortest time passes all stages of the inflammatory process, culminating in purulent melting of the tissue. Such a course leads to rapid spread of the process not only in the cellular spaces of the maxillofacial area, but also provides the development of severe intoxication syndrome. To a certain extent, this is due to the nature of the pathogenic microflora with its increasing resistance to the antibiotics used, sensitization of the microorganism and decreased immunological reactivity. Despite

significant success of antibiotic therapy, the main task of a surgeon is adequate dissection and drainage of purulent focus. It should be taken into account that the long-term results of treatment of patients with purulent inflammatory diseases of the maxillofacial soft tissues are determined by the choice of the direction of the skin incision, providing subsequently minimal cosmetic defects. In addition, it should be taken into account that the volume of the inflammation focus depends both on the patient's age and on his constitutional features. The existing ways of the floor phlegmon treatment need to be improved since they do not meet the modern requirements in full and are accompanied by high frequency of unfavorable functional results, especially in the distant postoperative period. In 20-30% of patients in the remote period after treatment rough scars are observed, as well as dysfunction of masticatory and muscles of the mouth floor, painful trigger zones. Thus, further scientific search and development of effective ways of surgical treatment of oral floor phlegmon is an urgent problem of maxillofacial surgery.

**Purpose of the study:** The results of treatment of patients with maxillofacial phlegmon in the department of pediatric maxillofacial surgery at the Tashkent State Dental Institute in 2020-2022.

**Materials and methods of research.** We have analyzed the structure and nature of the pathology of patients undergoing inpatient treatment for odontogenic phlegmon of the floor of the oral cavity of the maxillofacial region in the maxillofacial surgery department of TSSI during the period from 2020 to 2022. Specialized dental care was provided to all patients in the department. The total number of patients was 101 cases of odontogenic phlegmon of the floor of the oral cavity of the maxillofacial region for three years. Unilateral phlegmon - 11, bilateral - 90. Sixty-eight of them were men, 33 - women. The age of the patients was 30-43 years. Character of the patients' diseases according to ICD-10 classification, from which we can see that the most frequent pathology is exacerbation of chronic periodontitis, and less frequent - inflammatory diseases of the jaws. Inflammatory diseases of the jaws were the most common.

Phlegmons of the maxillofacial region are divided into: Group 1 (mild course) phlegmon localized in one anatomical area; Group 2 (medium severity) phlegmon localized in two or more anatomical areas; Group 3 (severe course) phlegmon localized in the soft tissues of the floor of the mouth, neck, half of the face, as well as a combination of phlegmon of the temporal region, subscapular and wing fossa. According to the results of clinical examination, phlegmon was found in (80%) patients with one facial space affected, in (15%) patients with two spaces affected, (4%) with three spaces affected, and (1%) with four or more spaces affected. On the basis of the used bibliosemantic and analytical methods with which we processed the literature data, we believe that the study of the problems of treatment methods of odontogenic phlegmon remains a relevant topic to which numerous works of both domestic and foreign scientists are devoted. But at the same time there is no consensus on conservative therapy of these diseases, especially in the presence of concomitant pathology that significantly affects the features of reparative processes. Therefore, solution of this problem requires further comprehensive study.

**Results of the study.** After the diagnosis was confirmed and the severity of the disease was determined, the patients were traditionally proposed to undergo surgical removal of phlegmon. We made an incision in the wound after the patient was injected with general anesthetics. The incisions were wide and suitable for drainage. Upon completion of the surgical part the patients were given dressings with antiseptics and hypertonic agents in the form of solutions. Antibiotics and analgesics were prescribed for further treatment. The average length of stay in the department was 8-10 days, in the most

complicated cases patients were treated for 15 to 25 days. The patient had to follow a special diet and undergo detoxification, excluding alcohol and other products from his diet for a while. The results of the anamnesis research allowed us to find out that the lower jaw molars were more often the cause teeth in patients with odontogenic phlegmons of the maxillofacial region.

All patients admitted to the department with odontogenic phlegmonas were operated on during the first hours after admission to the hospital. Analysis of the archival material revealed the involvement of one cellular space in an odontogenic inflammatory process of the maxillofacial region.

**Conclusions:** Thus, the basis of the new optimal surgical technology for treatment of extensive phlegmon of the oral cavity day is an active surgical tactics and restorative clinical and anatomico-functional concept of purulent surgery of these regions, Technological stages of surgical treatment are standardized according to the preferential localization and ways of purulent-inflammatory process distribution and have a primary reconstructive orientation. The developed new surgical technology of extensive phlegmon treatment of the mouth cavity floor and neck is more effective in comparison with the traditional methods as it permits to decrease essentially the number of operations carried out due to quick termination of purulent-inflammatory process and early closing of the operating wound healing in short terms by the type of primary tension. The peculiarities of the origin, spread and course of extensive phlegmon of the mouth cavity floor and neck are determined, among other things, by their predominantly anaerobic nonclosgrundnal character and progressive contact affection of the soft tissue structural elements.

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